

### Abstract

The present invention relates to a nitride semiconductor laser device provided with a window layer on a light-emitting end face of the resonator which comprises an active layer of nitride semiconductor between the n-type nitride semiconductor layers and the p-type nitride semiconductor layers, in which at least the radiation-emitting end face of said resonator is covered by said window layer comprising monocrystalline nitride of general formula  $Al_xGa_{1-x}In_yN$ , where  $0 \leq x+y \leq 1$ ,  $0 \leq x \leq 1$  and  $0 \leq y < 1$ , having a wider energy gap than that of the active layer and being formed at a low temperature so as not to damage said active layer. Formation of such a window layer improves significantly the performance of the nitride laser device according to the invention